



National Grid's Energy Efficiency Programs

FUPWG Presentation
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C&I Energy Efficiency Programs

- Commercial New Construction
- Large Commercial Retrofit
- Small Business Direct Installation
- Engineering and Other Services

Incentive Structure

- **Incentive offering for electric and gas measures varies**
 - ✓ **Prescriptive** approach
 - based on a per unit-basis (fixed)
 - ✓ **Custom** approach
 - based on the unique energy savings and cost criteria of a project
 - ✓ **Comprehensive** approach
 - based on the evaluation of the whole building; and
 - based on the benefits from examining an integrated engineering approach (for multiple measures)

Small Business Direct Installation

- ◆ Focuses on **direct install** of retrofit lighting, energy management systems, refrigeration, and prescriptive gas measures
 - New in 2010 – direct installation of widely applicable gas savings measures**
 - ✓ **Thermostats, hot water reset, insulation and other gas measures TBD**
- ◆ Non-direct install (i.e. custom) measures processed through Retrofit Program
- ◆ For customers with monthly demand of 200 kilowatts or less
 - ✓ Provides a free energy audit and recommendation for electric and gas energy efficiency improvements
 - ✓ Incentives of up to 70% of the cost of the installation of better performing equipment
 - ✓ Offers financing of the remaining 30% balance – interest free for up to 24 months on electric bill





Large Business Programs

Commercial New Construction

Formerly, electric incentives offered under Design2000*plus*; and gas incentives under Commercial Energy Efficiency and High Efficiency Heating Equipment programs.

Large Commercial Retrofit

Formerly, electric incentives offered under Energy Initiative; and gas incentives under Commercial Energy Efficiency and High Efficiency Heating Equipment programs.



Commercial New Construction

Eligible Electric & Thermal Energy Efficiency Measures (EEMs)

- ✓ **Compressed Air**
- ✓ **Lighting & Controls**
- ✓ **Heating, Ventilation and A/C Systems (HVAC)**
- ✓ **Efficient Boilers and Domestic Hot Water Systems**
- ✓ **Chillers, Refrigeration and Heat Recovery Systems**
- ✓ **Premium-Efficiency Motors and Variable Speed Drives**
- ✓ **Digital Energy Managements Systems (EMS)**
- ✓ **Process Efficiency Improvement Projects**
- ✓ **Combined Heat and Power (CHP)**
- ✓ **Custom (non-prescriptive measures or comprehensive)**

Prescriptive gas incentives for gas steamers, gas fryers and convection ovens.

Commercial New Construction Program

Solar - 2,500 Therms



Solar - \$7,400 Incentive



DCV - 17,000 Therms



DCV - \$13,000 Incentive



Providence Career & Technical Academy

HVAC Pump VFDs - 17,000 kWh & \$7,400

Premium Efficiency Motors - 7,000 kWh & \$3,000

Lighting Controls - 47,000 kWh & \$25,000

Lighting - 84,000 kWh & \$25,000

Kitchen Hood Fan VFDs - 8,000 kWh & \$3,800

Boilers - 3,100 Therms



Boilers - \$40,000 Incentive

Insulation - 7,100 Therms



Insulation - \$11,000 Incentive



Windows - 5,900 Therms



Windows - \$8,900

Large Commercial Retrofit

Eligible Electric & Thermal Energy Efficiency Measures (EEMs)

- ✓ **Compressed Air**
- ✓ **Lighting & Controls**
- ✓ **Chillers and Refrigeration**
- ✓ **Energy Management Systems**
- ✓ **Variable Speed Drives Industrial Process**
- ✓ **Process Cooling**
- ✓ **High Efficiency Heating and Water Heating**
- ✓ **Insulation (wall, floor, roof and pipe)**
- ✓ **Combustion Controls**
- ✓ **Combined Heat and Power (CHP)**
- ✓ **Controls – programmable t-stats, boiler reset, steam trap**
- ✓ **Commercial Kitchen - fryers, steamers, and pre-rinse spray valves**

Large Commercial Retrofit Program



HVAC VFDs - 220,000 kWh & \$50,000



Server Room Upgrades
14,000 kWh & \$12,600



Providence Housing Authority
Combined Heat & Power
78,000 Therms & \$111,000

RI Airport Corporation



EMS & DCV - 182,000 kWh & \$41,000



Free-Cooling
&
Controls
56,000 kWh
\$8,500



East Greenwich High School
EMS – 20,000 Therms & \$30,000
DCV (CO₂) – 900 Therms & \$1,000



Rhodes Technologies
Steam Boilers
7,300 Therms & \$11,000



Pepsi Bottling Group
Boiler Burner Controls
7,100 Therms
\$10,500 Incentive

Other C&I Energy Efficiency Programs & Services

◆ Engineering Services and Technical Assistance

- ◆ 50/50 cost share with customer of detailed engineering study approved by National Grid
 - Energy savings calculations, reliable cost estimates and incentive to be offered

◆ Whole Building Assessment

- ◆ Measure whole-building energy use for all sizes and complexities of projects
- ◆ Provide technical assistance and financial support

◆ ProjectExpediter (PEX)

- ◆ Authorized vendors provide turnkey services to improve energy efficiency of a building, from initial assessment through installation/ construction and final inspection.

◆ Municipal Initiative 2010 (for cities and towns)

- ◆ Financial incentives offered through normal C&I program offerings
- ◆ On-bill financing option for cities and towns (0% interest loan payable over 24 months)
- ◆ Technical assistance and whole building assessment

Energy Efficiency Programs & Services *(continued)*

- ◆ **Retro-Commissioning (RCx)**
- ◆ **Compressed Air Leak Detection & Remediation**
- ◆ **Multi-Family Programs** (non-residential service-related)
- ◆ **Lamp & Ballast Recycling Service** (for large & small business customers)
- ◆ **Economic Development**
- ◆ **Steam Assessment and Savings Initiative**
- ◆ **Training**
 - ◆ Building Operator Certification (BOC) – <http://www.theboc.info/>
 - ◆ End-use (e.g. pumps, fans, motors, compressed air, etc.) technical trainings in conjunction w/MAEEP (Labs21: NEW for 2008!)
 - ◆ Advanced Buildings/Core Performance training
- ✓ **Can earn Continuing Education Credits (CEU's)**

Business Programs' Contacts

◆ Customer Contact Information

- ◆ Small Business Program 1-800-332-3333
- ◆ Large Business Program 1-800-787-1706
- ◆ Natural Gas Energy Audit and Program 1-800-843-3636
- ◆ Your Account Manager
- ◆ www.Powerofaction.com